

Amendments to the Drawings:

The attached replacement drawing sheet makes changes to Fig. 2 and replaces the original sheets with Figs. 1 and 2.

Attachment: Replacement Sheet

REMARKS

Claims 1-8 are pending in this application. By this Amendment, claims 1 and 4 are amended. No new matter is added. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

The courtesies extended to Applicant's representative by Examiner Cintins at the interview held August 2, 2006, are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below and constitute Applicants' record of the interview.

I. Formal Matters

The Office Action objects to Fig. 2 because it is not clear what is meant by the legend "Related Art." Fig. 2 is amended to recite "Prior Art," so as to obviate the objection. Accordingly, Applicants respectfully request that the Examiner withdraw the objection to the drawings.

II. Claims Define Patentable Subject Matter

A. References fail to disclose all features of claims 1 and 4

The Office Action rejects claims 1 and 2 under 35 U.S.C. §102(b) as being anticipated by JP 2000-263039 (hereinafter "JP '039"); rejects claims 3 and 7 under 35 U.S.C. §103(a) as being unpatentable over JP '039 in view of Hatano et al. (U.S. Patent No. 6,602,816); rejects claims 4 and 5 under 35 U.S.C. §103(a) as being unpatentable over JP '039 in view of JP 10-309567 (hereinafter "JP '567"); and rejects claims 6 and 8 under 35 U.S.C. §103(a) as being unpatentable over JP '039 in view of JP '567 and further in view of Hatano et al. Applicants respectfully traverse these rejections.

Specifically, Applicants assert that JP '039, JP '567, and Hatano, individually or in combination, fail to disclose a method of adding activated carbon in water purification treatment including *at least the steps of* crushing the activated carbon in situ in a water

treatment plant, and adding activated carbon to water to be treated to purify water to be treated, characterized in that an aqueous suspension containing activated carbon fine particles having an average particle size of 0.1 μm to 10 μm obtainable by wet milling of the particles of the activated carbon is added to the water to be treated, as recited in independent claims 1 and 4.

JP '039 discloses a water purification method where active carbon having a large particle diameter is first crushed by ultrasonic wave in water to obtain an average particle diameter of 10 μm to 20 μm . Then the crushed active carbon is used for preparation of active carbon-containing suspension, which is temporarily stored in a reservoir. The temporarily stored suspension is then transported via Tank Rory to a water purification site where it is diluted to a proper concentration and added to a reaction vessel of the water purification plant. Finally, the added suspension is used to purify raw water. Thus, JP '039 fails to disclose a method of adding activated carbon in water purification treatment including at least the steps of crushing the activated carbon in situ in a water treatment plant, and adding activated carbon to water to be treated to purify water to be treated, as recited in independent claims 1 and 4.

JP '567 merely discloses a water treatment plant including a means for adding active carbon having a particle diameter of 0.01 μm to 10 μm to water for performing a membrane separation treatment. JP '039, however, nowhere discloses crushing the active carbon in situ in a water treatment plant, and thus, fails to disclose a method of adding activated carbon in water purification treatment including at least the steps of crushing the activated carbon in situ in a water treatment plant, as recited in claims 1 and 4.

Hatano discloses a method of wet milling clay into a form of aqueous slurry and mixing the clay slurry with acid-soluble or acid-decomposing inorganic compound slurry. Hatano, however, nowhere discloses crushing activated carbon in situ in a water treatment

plant, and thus, fails to disclose a method of adding activated carbon in water purification treatment including at least the steps of crushing the activated carbon in situ in a water treatment plant, and adding activated carbon to water to be treated to purify water to be treated, as recited in claims 1 and 4.

Accordingly, Applicants assert that JP '039, JP '567, and Hatano, individually or in combination, fail to disclose a method of adding activated carbon in water purification treatment including *at least the steps of* crushing the activated carbon in situ in a water treatment plant, and adding activated carbon to water to be treated to purify water to be treated, as recited in independent claims 1 and 4.

B. Lack of motivation and documentary evidence to support obviousness

Furthermore, regarding the §103(a) rejection of claims 3 and 7, Applicants assert that it would not have been obvious to one of ordinary skill in the art at the time the invention was made to 1) substitute the milling machine of Hatano for the ultrasonic wave unit of JP '039, and 2) to attach the milling machine of Hatano to a passage or tank of the water to be treated, as recited on page 3 of the Office Action. Specifically, Applicants assert that none of the references contain motivation for the above modifications, and that the Examiner has not provided documentary evidence supporting the assertion that such modifications would have been obvious to one of ordinary skill in the art at the time the invention was made. Thus, Applicants respectfully assert that it would not have been obvious to one of ordinary skill in the art to combine the teachings of JP '039 with those of Hatano to result in the claimed invention.

III. Conclusion


In accordance with the above remarks, Applicants submit that independent claims 1 and 4 define patentable subject matter. Claims 2-3 and 5-8 depend from independent claims 1 and 4, respectively, and therefore, also define patentable subject matter. Accordingly,

Applicants respectfully request that the Examiner withdraw the §102(b) and §103(a) rejections of claims 1-8.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-8 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:
Replacement Drawing Sheet
Request for Continued Examination

Date: August 11, 2006

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